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Development of wheat bread and gluten-free bread formulations containing Mozuku (*Chordaria cladosiphon*)

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Many seaweeds such as *Chordaria cladosiphon*, commonly known as mozuku, contain several health promoting components such as dietary fibre, antioxidants, and a range of bioactive compounds. Mozuku, an edible brown seaweed constitutes an important part of the diet of native Okinawans who enjoy long lives and consume the seaweed mixed with various seafoods and vegetables. Brown seaweeds and their isolated compounds, specifically a long-chain polysaccharide known as fucoidan, are reported to retard the formation and growth of various cancer cells in humans as well as having anticoagulation, antiviral and immunological activities. The present study developed wheat and gluten-free bread formulations containing mozuku powder aimed at introducing its potential health benefits to a wider consumer base through bread, a staple food product. In this study, wheat bread and gluten-free bread containing variable levels of mozuku powder were successfully developed. Wheat bread samples containing up to 2% mozuku powder were well-accepted by consumer sensory panelists. Whereas, gluten-free bread containing 2.5% mozuku was well-liked by consumer sensory panelists.

Biography

Tony Mutukumira has been working on food product development, food safety and preservation, food fermentations and processing. Tony has particular interest in the use of natural bioactives in consumer foods and their potential in preservation. The present work describes the potential of adding brown seaweed into bakery products. Tony is a scientific reviewer for several international peer-reviewed journals and a member of several renowned professional bodies.

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